MEMORANDUM

DATE: OCT 0 8 2002

SUBJECT: **ENFORCEMENT ACTION MEMORANDUM** - Determination of Need to Conduct a Time-Critical Removal Action at the Resource Recovery Group/Clayton Chemical Site, Sauget, St. Clair County, Illinois 62201 (Site ID: B5X4)

FROM: Kevin Turner, On-Scene Coordinator
Emergency Response Branch - Section II

TO: William E. Muno, Director
Superfund Division

THRU: Richard Karl, Chief R. Karl
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to document the need to conduct a time-critical removal action to mitigate an imminent and substantial threat to the public health and the environment posed by the presence of hazardous waste and hazardous substances located at the former Resource Recovery Group/Clayton Chemical Site (RRG/Clayton Chemical). The RRG/Clayton Chemical site is a former spent solvent and waste oil re-claimer located at 1 Mobile Avenue, Sauget, St. Clair County, Illinois 62201 (see Attachment 3). The on-site soils contain hazardous wastes and hazardous substances and the above ground storage tanks contain nonhazardous waste oil, hazardous waste oil, and hazardous waste solvents. This response action is necessary to mitigate the immediate threat to public health and the environment posed by these hazardous substances. The Site Assessment revealed that the on-site soils had an oily appearance, contained paint and had some unknown white, flaky materials. In addition the soil data shows elevated levels of arsenic, cadmium, lead and chromium, toluene, chlorobenzene, 1,4 dichlorobenzene and PCBs. Lead and PCBs are considered the main contaminants of concern for soils.

This site is not on the National Priorities List (NPL); however, the site is physically located in the middle of the Sauget - Area 2 Sites which have been determined to be eligible for listing. This site does not exhibit any nationally significant or precedent-setting issues associated with the response action

herein described.

CERCLIS ID Number ILD066918327

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Site History

Prior to 1961, the property was owned by GM&O Railroad who utilized the property as a railroad roundhouse and maintenance facility. In 1961, RRG/Clayton Chemical leased the property from GM&O Railroad and began the process of recovering and recycling spent solvents and waste oil. The owners of the facility often would lease out portions of the property to other companies for storage and transfer operations of various activities.

The reclaimed spent solvents and oils entered the facility either by bulk truck or in drums. The contents of the bulk trucks were then transferred to above ground storage tanks prior to the reprocessing operations. The drums were stored in a drum storage area. Old historical photographs show the drum storage area to be an open area near the back of the property. A drum warehouse and loading dock was added at a later date.

The facility basically accepted three different types of material: nonhazardous waste oil, hazardous waste oil and hazardous waste solvents. The known hazardous waste material processed at the facility included, but was not limited to, the following U.S. EPA waste codes: D001, D007, D008, F001, F002, F003, F005, and F006. The spent solvents were processed through a distillation process and the cleaned solvents were sold to industries. One known use of the residual bottom sludge from the distillation process was that it was mixed with chemicals and sold for use in the pavement industry. The site was also known to function as a bulk-oil storage and handling facility.

In May, 1981, the Village of Sauget deeded the property to the Clayton Chemical Company. In November 1996, Clayton Chemical Company discontinued operations due to insolvency. Between 1996 and 1998, the same business was operated under a new name, the Resource Recovery Group (RRG). In 1998, Illinois EPA denied the RCRA permit of RRG and the facility was not allowed to accept more hazardous waste. The facility has been essentially vacant since 1998.

2. Physical location

The facility is located at 1 Mobile Avenue, Sauget, St. Clair County, Illinois (latitude 38°35'72.4"N and longitude 90°11'02.2"W). The facility is located approximately one-quarter

mile from the Mississippi River. The site is located within an area known as the American Bottoms flood plain of the Mississippi River, but outside the U.S. Corps of Engineers constructed flood wall (i.e. flood levee). The site consists of approximately 7 acres of land. The area surrounding the site is industrial. The Onyx Hazardous Waste Incinerator (formerly Trade Waste Incineration (TWI))borders the facility on the west. The American Bottoms wastewater treatment plant borders the facility on the north and south and the City of Sauget's wastewater lagoons are on the east.

Within one-half mile there are several large companies conducting a variety of activities. These companies include but are not limited to Slay Terminal and Peabody Coal who transfer coal from barges to trucks and trains, a Union Electric sub-station, River City Landscape Supply, Solutia, Big River Zinc, Oxy Chemical and Cerro Copper.

The 7 acre site is entirely fenced. The main gate to the RRG/Clayton facility is on the north side of the property near the main gate of the Onyx Incinerator.

In Illinois, the low-income percentage is 27% and the minority percentage is 25%. To meet the Environmental Justice (EJ) concern criteria, the area within 1 mile of the Site must have a population that's twice the state low-income percentage and/or twice the state minority percentage. That is, the area must be at least 54% low income and/or 50% minority. At this Site, the low-income percentage is 78% and the minority percentage is 22% as determined by ArcView EJ analysis. However, less than 1 mile south of the Site, the low-income percentage is 34% and the minority percentage is 100% as determined by ArcView EJ analysis. Therefore, these demographic conditions indicate an EJ priority for the community around the site (see Attachment 4).

3. Removal site evaluation

During June 5-7, 2001, U.S. EPA mobilized to the RRG/Clayton Chemical site to perform a Site Assessment. The on-site personnel, which included OSCs, START members, and Illinois EPA staff, were divided into three separate teams: the drum team, the geoprobe team and the backhoe team.

The drum team verified drum and tank inventory lists provided by RRG. The drum team opened and sampled drums, counted various sized and shaped tanks, and miscellaneous small containers throughout the property. The geoprobe team sampled groundwater and subsurface soils throughout the property but concentrated in areas where the backhoe could not reach or where the backhoe would have caused excessive damage. The backhoe team dug test

pits, concentrating primarily on those areas away from the tanks and process equipment.

Using the drum and tank inventory list provided by RRG, the site assessment team used dedicated glass-drum thieves to sample various containers throughout the site. The intent of the drum and container survey was to assume that the inventory list provided was correct. Then to spot check the list through hazardous characterization verification. In addition, the team surveyed the entire property and found several buildings which had containers that were not included on the inventory lists. These buildings include the contents of the East Storage Building, the Boiler Garage Building and the on-site Laboratory Building.

A total of ten groundwater samples were collected throughout the site using the Illinois EPA geoprobe. The groundwater samples were taken at depths of 8 to 16 feet below ground surface. Many of the samples had odors of petroleum. The groundwater samples were analyzed for RCRA metals, PCBs, pH, total cyanide and Volatile Organic Compounds(VOCs). A summary of the groundwater results shows that Maximum Contaminant Limits (MCLs) have been exceeded in seven of the ten samples. Vinyl chloride, benzene, toluene, and xylene are four examples of VOCs which exceeded MCLs.

There were twenty-two soil samples taken by the geoprobe and backhoe teams. The soil samples were collected throughout the site at depths up to 12 feet below ground surface. The soil possessed an assortment of chemicals and odors which emerged from the ground when soil sampling and soil borings were collected. In some areas, the soil had an oily appearance, contained paint, or contained some unknown, white, flaky material. The soil samples were analyzed for RCRA metals, PCBs, Total Petroleum Hydrocarbons(TPH), pH, ignitability, Semi-volatile Organic Compounds(SVOCs) and VOCs.

The various inventory lists provided by RRG indicate that there are hazardous wastes and hazardous substances located on-site. These include but are not limited to caustics, corrosives, ignitable hazardous liquids, solvents, acids, liquid fuels, oil and dry cleaning waste materials. The various inventory lists also indicate that the following U.S. EPA waste codes are still present on-site: D001, D007, F001, F002, F003, and F005.

A summary of the soil analytical data indicate elevated levels of contaminants. Total lead ranged from 2,383 milligrams per kilogram (mg/kg) to 14,368 mg/kg, and chromium concentrations up to 3,292 mg/kg. The usual cleanup action level for lead in industrial property is 1000 mg/kg.

The PCB analytical results showed four samples above the 50 mg/kg

cleanup goal. Four of the samples indicated a hazardous substance by the closed cup ignitability test and five of the samples exceeded 10,000 mg/kg for TPH thereby demonstrating the presence of a petroleum product.

Eight VOCs were detected in soil samples from across the site. Toluene, chlorobenzene, ethylbenzene, and xylene are four VOCs that were detected in the soil samples.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

The Site Assessment Report released in September, 2001, demonstrates that actual releases of various contaminants have entered the environment. In addition, the presence of hazardous waste and hazardous substances in the above ground storage tanks and drums continues to present a threat of more releases to the environment.

B. State and Local Authorities' Role

When the facility was in operation, the Illinois EPA was the regulatory agency responsible for overseeing RCRA compliance. Throughout the years there have been numerous complaints, allegations and incidents of non-compliance. Illinois EPA was the keeper of the annual waste reports as required by RCRA and regularly received the weekly Tank and Drum Dock Inventory Reports submitted by RRG. In addition, Illinois EPA participated in the June, 2001, Site Assessment by providing their geoprobe and the crew to operate the geoprobe. Illinois EPA will be unable to mitigate threats from this site posed by the presence and migration of hazardous wastes. The site has been referred to the U.S. EPA for possible removal actions. The U.S. EPA has determined that a time-critical removal action is necessary to abate threats to human health and the environment.

III. THREATS TO PUBLIC HEALTH OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the RRG/Clayton Chemical site constitute a threat to public health and welfare or the environment based upon the considerations set forth in the National Contingency Plan (NCP), 40 CFR Section 300.415 (b)(2) which include, but are not limited to the following:

1. **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.**

This factor is present at the RRG/Clayton Chemical Site due to the existence of containerized hazardous and ignitable waste and substances in drums, barrels, tanks and other bulk storage containers. Though these liquid wastes and substances are currently containerized, the conditions on-site are considered unstable. Illinois EPA has historically documented numerous spills in and around the various tanks and drum storage areas. These spills came from either the tanks, the drums, during the transfer operations from or to tanker trucks, or during the distillation process. As evidenced by the Site Assessment, many of these spills were never properly cleaned up to acceptable environmental standards.

The Site Assessment revealed several areas where bulk waste was dumped directly into the ground. During the Site Assessment, 59 test pits were dug throughout the property. Bulk paint waste, a white flaky material, black oil and fuel stained soil was discovered in many of the test pits. The laboratory analytical results for both soil and groundwater, as stated above, further documented that actual releases to the environment have occurred.

2. Elevated levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface.

Analytical results indicated that both surface and subsurface soils at the RRG/Clayton Chemical site have been impacted by elevated concentrations of various heavy metals, PCBs, and ignitable compounds. The contamination exists on the ground surface where it may easily migrate via surface water runoff or become airborne. Although an extensive geological study of the site has not been performed, area soils appear to be of a porous, sandy nature, which would facilitate contamination migration to groundwater.

3. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.

The Site Assessment documented that surface contamination could migrate off site via heavy rains, flooding or severe winds. Heavy rains may cause further migration of contaminants off site. Winds could cause dust particles containing heavy metals and PCBs to migrate off site. These weather conditions could result in a continued release of the hazardous wastes described herein to the surrounding soil, air and surface water.

4. Threat of Fire or Explosion

There is a potential for fire or explosion due to the low ignitability temperatures found in four of the samples. Each of these results were lower than the 140°F limit which U.S. EPA

considers an indicator of hazardous waste materials.

5. The availability of other appropriate federal or state response mechanisms to respond to the release.

Illinois EPA requested U.S. EPA, Region 5, assistance with the RRG/Clayton Chemical site. The State of Illinois does not have the funds to undertake removal of the hazardous wastes and hazardous substances found at this site.

IV. ENDANGERMENT DETERMINATION

The Site Assessment documented actual and potential releases to the environment. The presence of hazardous waste and hazardous substances within on-site tanks and drums and of elevated concentrations of various heavy metal, VOCs and PCBs in on-site soils as stated in Section II above, poses an imminent and substantial endangerment to the environment. Therefore, given the site conditions, the nature of the hazardous substances, and the potential exposure pathways described in Section III above, actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment.

V. PROPOSED ACTIONS

A. Proposed Actions

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances or contaminants at the site, which may pose an imminent and substantial endangerment to public health and safety, or the environment.

The purpose of this removal action is to mitigate the imminent and substantial threats posed to public health or welfare or the environment from wastes at the site. The proposed immediate response action includes the following actions:

1) Develop and implement a Site Health and Safety Plan, including an Air Monitoring Plan and Site Contingency Plan; and

2) Develop and implement a Site Security Plan.

The following tasks are for all on-site liquids and other containerized waste:

3) Confirm through an appropriate means the contents and volumes of the Weekly Tank Inventory Report as supplied by RRG; and

4) Characterize, remove and properly dispose of all hazardous liquids found on-site. This list may include but is not limited to all hazardous liquids, hazardous waste, reusable product or reclaimed product, potable or waste waters, fuel, oil, asphalt, oil and water, laboratory chemicals and the contents of the sample jars in the Drum Storage Area; and

5) All vessels must be emptied of their contents and either removed off-site or rendered unuseable. All vessels may include but not be limited to drums, tanks, storage tanks, vertical tanks, laboratory and sample jars, cylinders, buckets, pails and cans. For the purposes of this Action Memorandum a vessel on this site includes all above ground and below ground pipes and flow lines. These pipes and flow lines shall be drained of their contents and rendered unuseable; and

6) Characterize, remove and properly dispose of hazardous substances and wastes (solids) located at the Site in accordance with U.S. EPA's Off-Site Rule (40 CFR 300.440). These solids may be found within the site boundaries in drums, tanks, buckets, pails, cans, bags or any other type of container.

The following tasks are for all on-site soils only:

7) Characterize, remove and properly dispose of hazardous substance and wastes (contaminated soils) located at the Site in accordance with U.S. EPA's Off-Site Rule (40 CFR 300.440); and

8) Backfill the excavated areas with clean material and topsoil. Restore and vegetate to prevent soil erosion.

B. <u>Contribution to Remedial Performance</u>

The proposed removal action will not impede future responses based upon available information. The Removal Program will coordinate with the Remedial Program to determine if further remedial response actions are warranted to ensure that the Site does not further contribute to the Sauget - Area 2 contamination. Institutional controls may also be considered to limit future uses of the site.

The proposed removal action will address all threats meeting the NCP Section 300.415(b)(2) removal criteria as identified in Section III of this Action Memorandum.

C. Applicable or Relevant and Appropriate Requirements (ARARs)

A letter will be sent to Bruce Everetts of the Illinois EPA, requesting the State to identify State ARARs. Compliance, to the extent practicable, with all ARARs of Federal and State environmental statutes and laws identified in a timely manner will be assured during this removal action.

The removal action will be taken in a manner not inconsistent with the NCP. The OSC has initiated planning for provision of post-removal site control, consistent with the provisions of Section 300.415(i) of the NCP.

All hazardous waste generated pursuant to the removal action will be disposed of in compliance with the Off-Site Rule, 40 CFR Section 300.440, 58 Federal Register 49215 (September 22, 1993).

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the site which may pose an imminent and substantial endangerment to public health and safety or to the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

D. Project Schedule

The removal action is expected to take place in phases. One phase will be a liquid removal action and the second phase will be a soil removal action. Due to the possibility of two separate PRP groups, the soil removal action may start at a later date than the liquid removal action.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delay or non-action may result in an increased likelihood of additional releases to the environment and may adversely affect neighboring or on-site workers. Additionally, there may be further releases to on and off-site soils and groundwater.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with the RRG/Clayton Chemical site.

VIII. ENFORCEMENT

U.S. EPA will be working in coordination with the potentially responsible parties (PRPs) to eliminate the hazards posed by the site. For administrative purposes, information concerning the enforcement strategy for this site is contained in an Enforcement Confidential Addendum (Attachment 2).

IX. RECOMMENDATION

This decision document represents the selected removal actions for the RRG/Clayton Chemical Site, Sauget, St. Clair County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the information in the Administrative Record (Attachment 1) for the site. Conditions at the site meet the NCP Section 300.415(b)(2) criteria for a removal action. You may indicate your decision by signing below.

APPROVE: _____ DATE: 8 Oct 02
for William E. Muno, Director
Superfund Division

DISAPPROVE: _____ DATE: _____
William E. Muno, Director
Superfund Division

Attachments:

1. Administrative Record Index
2. Enforcement Addendum
3. Site Map
4. Region 5 Superfund EJ Analysis
5. Litigation Index (Attorney Work Product/Confidential)

cc: R. Worley, U.S. EPA HQ, 5202G
M. Chezik, U.S. Department of Interior, **w/o Enf. Addendum**
B. Everetts, Illinois EPA, **w/o Enf. Addendum**
T. Miller, Illinois EPA, **w/o Enf. Addendum**

BCC PAGE

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

(REDACTED 1 PAGE)

ATTACHMENT 1
U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
RRG/CLAYTON CHEMICAL SITE
SAUGET, ST. CLAIR COUNTY, ILLINOIS

ORIGINAL
SEPTEMBER 27, 2002

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	1974-1998	Illinois EPA	File	Hazardous Waste Reports for the Clayton Chemical Site	2285
2	09/06/01	Roy F. Weston, Inc.	U.S. EPA	Removal Assessment Report for the Clayton Chemical Site (FINAL DRAFT)	287
3	03/06/02	Karl, R., U.S. EPA	Addressees	Letter re: General Notice of Potential Liability for the RRG/Clayton Chemical Site w/Attached List of Recipients	6

ATTACHMENT 2

ENFORCEMENT ADDENDUM

CLAYTON CHEMICAL SITE
SAUGET, ILLINOIS

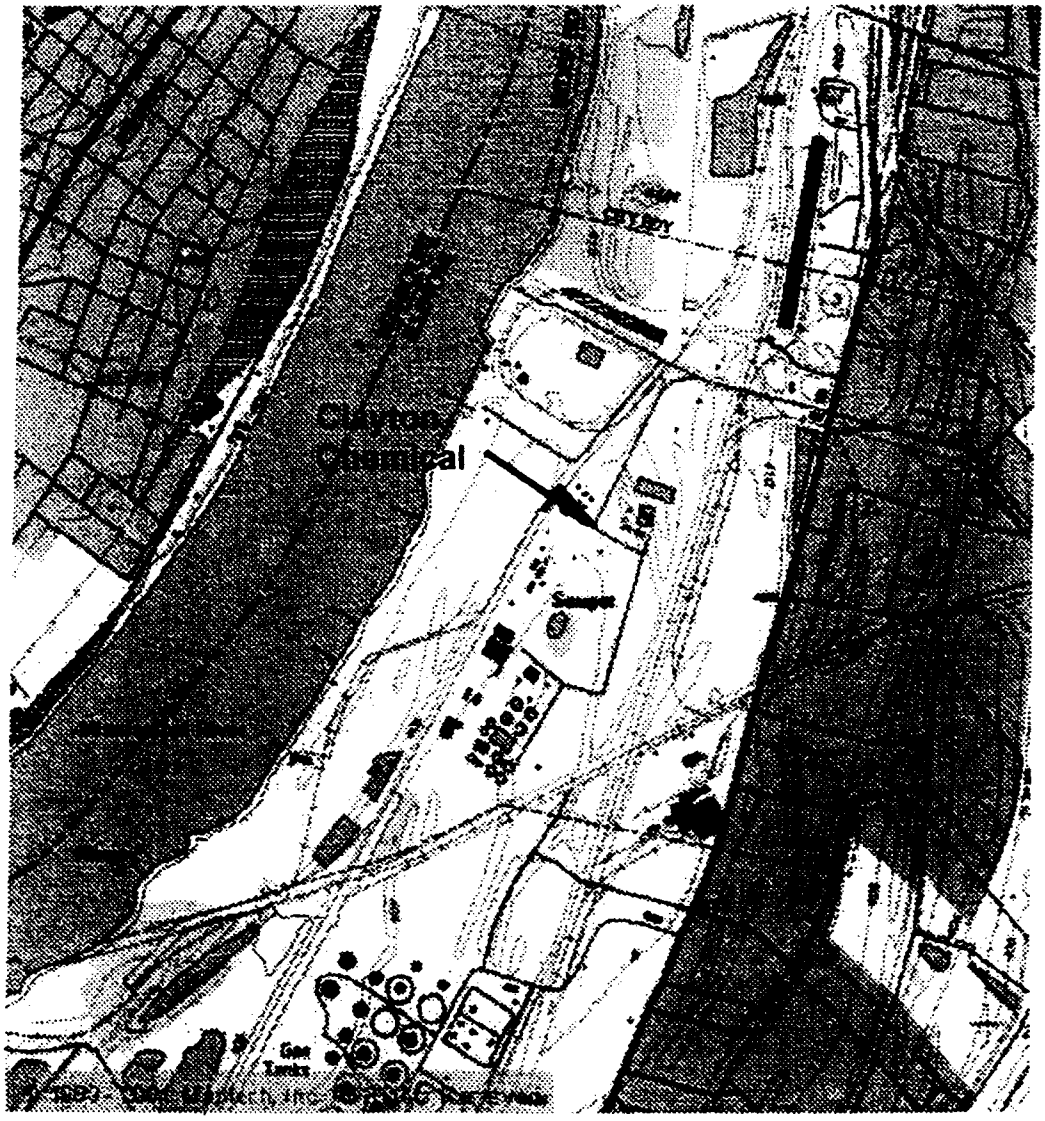
SEPTEMBER 2002

ENFORCEMENT CONFIDENTIAL
NOT SUBJECT TO DISCOVERY

(REDACTED 2 PAGES)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT 3
SITE MAP



R. F. Weston

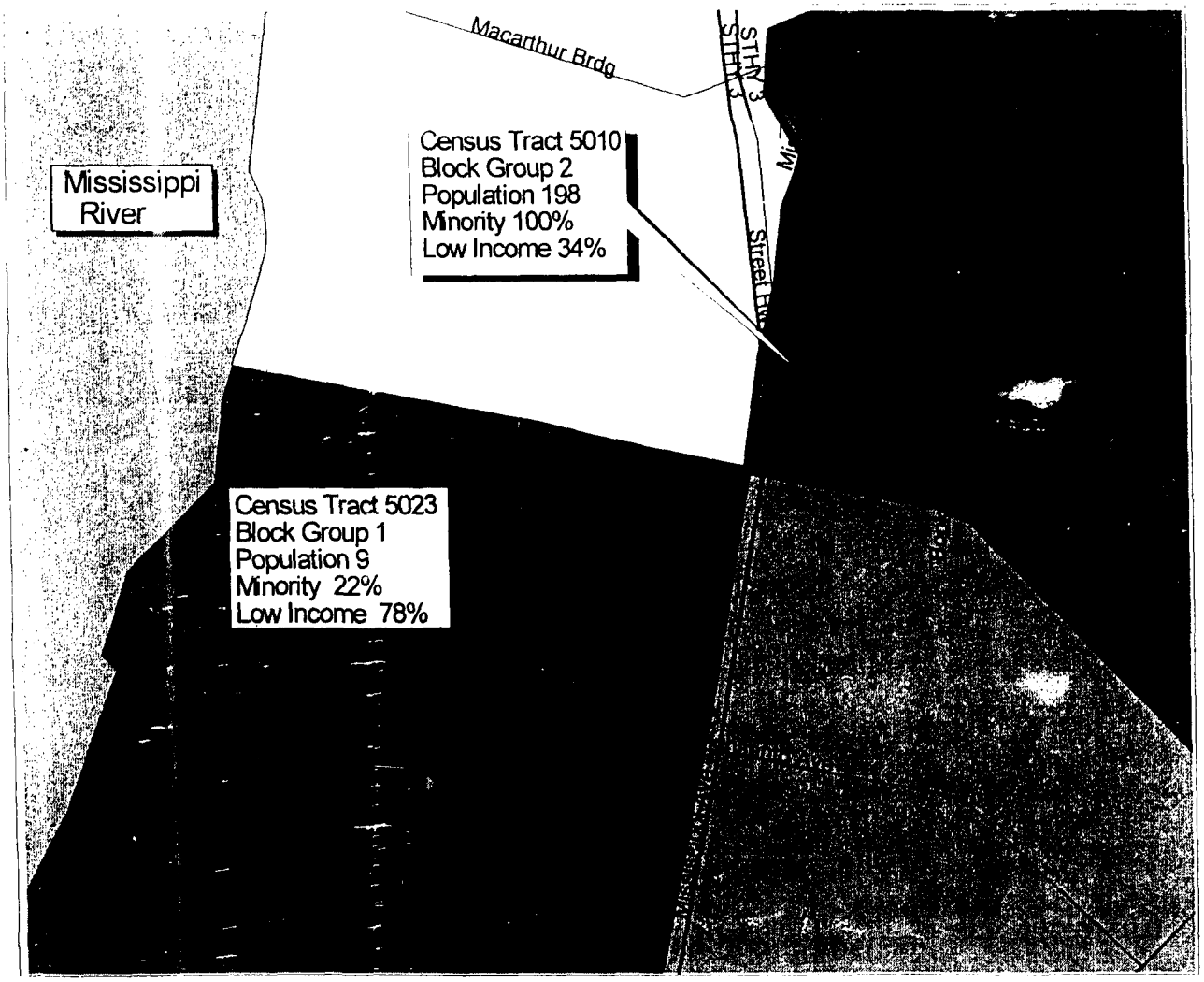
Region 5 - Superfund Technical Assessment and Response Team

Suite 400 - 3 Hawthorn, Vernon Hills, IL 60061-1450

TITLE Site Location	FIGURE 1
SITE Clayton Chemical Site Assessment	SCALE Not to scale
CITY Sauget STATE Illinois	TDD S05-0105-009
SOURCE Maptech Inc.	DATE September 5, 2001
	REVISED NA

Region 5 Superfund EJ Analysis

Clayton Chemical (RRG) Site Sauget, IL



EJ Identification

- Low Income and Minority Less than State Average
- Low Income or Minority at or Greater than State Average
- Low Income or Minority 2 Times or Greater than State Average [meets Region 5 EJ Case criteria]
- Site Location
- Block Group Boundary

Region 5 EJ Case Criteria for Illinois
Minority: 50% or greater
Low Income: 54% or greater

N

U.S. EPA Region 5
Superfund [illegible]

Date of Map 8/5/02

ATTACHMENT 5
REGION 5 SUPERFUND LITIGATION INDEX

1. U.S. EPA Site Assessment Report (September 2001) - Clayton Chemical Site, Sauget (St. Clair County) IL

2. Illinois EPA Annual Hazardous Waste Reports for Clayton Chemical Site , Sauget (St. Clair County) IL - for 1995-1998

3. General Notice Letter for RRG/Clayton Chemical Superfund Site (w/ attachments); dated: March 6, 2002

4. U.S. EPA (contractor SAIC-generated) Hazardous Waste Volumetric Ranking and Raw Data Index for RRG/Clayton Chemical Co. Superfund Site (dated: January and February 2002)

5. U.S. EPA Itemized Cost Summary for Clayton Chemical Co. (Site i.d. #B5X4) - dated: August 22, 2002